

102/03

102/03 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	1689.0320001
First Inventor	Kevin J. Powell
Title	Optimization of a Binary Tree Traversal With Secure Communications
Express Mail Label No.	

APPLICATION ELEMENTS
See MPEP chapter 600 concerning utility patent application contents.**ADDRESS TO:**Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

1. ☐ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 42]
(preferred arrangement set forth below)
- Descriptive title of the Invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table,
or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 9]
5. Oath or Declaration [Total Pages _____]
a. ☐ Newly executed (original or copy)
b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
a. ☐ Computer Readable Form (CRF)
b. Specification Sequence Listing on:
i. ☐ CD-ROM or CD-R (2 copies); or
ii. ☐ paper
c. ☐ Statements verifying identity of above copies

22386 U.S. PTO
10/693687

10/27/03

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Two Return Receipt Postcards (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)
☒ Other: The name of the assignee is: Matrics, Inc.

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No: _____ / _____
Prior application information: Examiner _____ Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS☒ Customer Number 26111or ☐ Correspondence address below

NAME	STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.				
	Attorneys at Law				
ADDRESS	1100 New York Avenue N.W.				
CITY	Washington	STATE	DC	ZIP CODE	20005
COUNTRY	U.S.	TELEPHONE	(202) 371-2600	FAX	(202) 371-2540

NAME (Print/Type)	Jeffrey S. Weaver	Registration No. (Attorney/Agent)	45,608
SIGNATURE		Date	10-27-03

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cormwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millonig
Lawrence B. Bugalsky
Donald J. Featherstone
Michael V. Messinger

Judith U. Kim
Timothy J. Shea, Jr.
Patrick E. Garrett
Heidi L. Kraus
Edward W. Yee
Albert L. Ferro*
Donald R. Banowitz
Peter A. Jackman
Molly A. McCall
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Albert J. Fasulo II*
Eldora Ellison Floyd
Thomas C. Fiala
Brian J. Del Buono
Virgil Lee Beaston*

Kimberly N. Reddick
Theodore A. Wood
Elizabeth J. Haanes
Bruce E. Chalker
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhullier
Rae Lynn Prengaman
Jane Shershenovich*
Lawrence J. Carroll*
George S. Bardmesser
Daniel A. Klein*
Rodney G. Maze
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller
Jon E. Wright*

LuAnne M. Yuricek*
John J. Figueroa
Ann E. Summerfield

Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Helene C. Carlson
Gaby L. Longworth
Matthew J. Dowd
Aaron L. Schwartz
Angelique G. Uy
Mary B. Tung
Katrina Y. Pei
Bryan L. Skelton
Robert A. Schwartzman
Timothy A. Doyle
Jennifer R. Mahalingappa

Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford
Eric D. Hayes

Of Counsel
Kenneth C. Bass III
Lisa A. Dunner
Evan R. Smith

*Admitted only in Maryland
*Admitted only in Virginia
•Practice Limited to
Federal Agencies

October 27, 2003

WRITER'S DIRECT NUMBER:

(202) 772-8831

INTERNET ADDRESS:

JWEAVER@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop: Patent Application

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)
Appl. No. To be assigned; Filed: October 27, 2003
For: **Optimization of a Binary Tree Traversal With Secure Communications**
Inventors: Powell *et al.*
Our Ref: 1689.0320001

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
2. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
3. U.S. Utility Patent Application entitled:

Optimization of a Binary Tree Traversal With Secure Communications

and naming as inventors:

**Kevin J. Powell,
Wayne E. Shanks, and
William R. Bandy**

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);

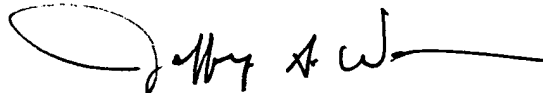
- b. A specification containing:
 - i. 33 pages of description prior to the claims;
 - ii. 8 pages of claims (35 claims); and
 - iii. a one (1) page abstract;
 - c. 2 sheets of drawings (Figures 1, 2, 3A, 3B, 4-8, 9A, 9B, 10A, 10B);
and
4. Two return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

This patent application is being submitted under 37 C.F.R. § 1.53(b) without Declaration and without filing fee.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey S. Weaver
Attorney for Applicants
Registration No. 45,608

JSW/asl
Enclosures

SKGF_DC1:189099.1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Powell *et al.*

Appl. No. To be assigned

Filed: October 27, 2003

For: **Optimization of a Binary Tree
Traversal With Secure
Communications**

Confirmation No. n/a

Art Unit: To be assigned

Examiner: To be assigned

Atty. Docket: 1689.0320001

**Authorization To Treat A Reply As Incorporating An Extension Of
Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jeffrey S. Weaver
Attorney for Applicants
Registration No. 45,608

Date: 10-27-03
1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600